

REMARKS

Claims 1-62 are currently pending in the application. No new matter has been added.

I. CLAIM REJECTIONS UNDER 35 U.S.C. § 102

Claim 18-20, 23, 24, 29, 34-36, 47-48, and 50-54 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,662,342 issued to Marcy et al. (Marcy).

For claim 18, there are one or more claimed limitations that are not disclosed, taught or suggested by the cited references. Claim 18 recites the following limitations:

receiving the schema for the data that is based on the mark-up language;

identifying a child node that is to be accessed within the data;

reviewing the schema to determine one or more access parameters relating to the child node, wherein at least one **access parameter is determined for the child node relative to the parent node**; and

using the one or more access parameters to directly access the child node.

1. Claim 18 recites “reviewing the schema to determine one or more access parameters relating to the child node, wherein at least **one access parameter is determined for the child node relative to the parent node**; and using the one or more access parameters to directly access the child node.” According to the Office Action, column 4, lines 40-55, column 6, lines 2-11, and column 9, lines 21-24 of Marcy allegedly disclose reviewing the schema to determine one or more access parameters relating to the child node, wherein at least one access parameter is determined for the child node relative to the parent node. Applicants respectfully submit that Marcy does not teach or suggest

reviewing the schema to determine one or more access parameters relating to the child node, wherein at least one access parameter that is determined for the child node relative to the parent node.

In contrast, Marcy is directed toward determining the structure of objects in an XML document by parsing the document itself to determine instances of objects, such as elements and attributes. (Marcy, Abstract and col. 4, lines 35-36). Marcy discloses scanning the Document Type Definition (DTD) to store often repeated element and attribute names into a string pool and providing a handle to the names in the string pool. (Marcy, col. 4, lines 45-55). Next, Marcy teaches parsing the XML document to determine specific **start and end locations in the XML document text for the values of all of the attributes**. (Marcy, col. 5, lines 20-32). Marcy teaches that the application program may ascertain the hierarchical relationships of objects from the prolong section, DTD or from tagged relation objects within the XML document. (Marcy, col. 6, lines 12-15 and col. 9, lines 21-24). In order for the application to access XML data, the Marcy parser provides a **handle to frequently used strings** (i.e. an element or attribute name) stored in a separate string pool from the XML data, a **start and end location in the text of the XML document for XML data values of the attributes** of the XML objects, and the application may access a definition for the hierarchy of elements (e.g. DTD). Thus, Marcy accesses XML data in an XML document with start and end locations within the file and does not rely on any access parameters that are determined for the child relative to the parent node. Marcy does not teach or suggest reviewing a schema to determine one or more access parameters to **directly access a child node with at least one access parameter** that is determined for the **child node relative to the parent node** after review of a schema.

For at least this reason, Applicants respectfully submit that claim 18 is allowable over Marcy.

2. Claims 34 and 35 recite sufficiently the same limitations as claim 18, and therefore, are patentable over Marcy.
3. Claims 19-20, 23-24, 29, 36, 47-48, and 50-54 are rejected and depend on independent claims 18, 34, and 35, and therefore, are patentable over Marcy.

## II. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-4, 8, 10-12, 14, 21, 30-33, 37-38, 40, 42-43, 45, 56, and 60 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Marcy in view of U.S. Patent Publication No. 2001/0029604 published by Dreyband et al. (Dreyband). Claims 15-17, 57-58, and 61-62 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Marcy in view of Dreyband in view of U.S. Patent Publication No. 2003/0233618 published Wan (Wan). Claims 25-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Marcy in view of Wan. Claims 5-7, 9, 13, 39, 41, 44, 46, 55, and 59 stand rejected under 35 U.S.C. 103(a) as being unpatentable Marcy and Dreyband in view of the Java Architecture for XML Binding (JAXB) published by Sun Microsystems on January 8, 2003. Claims 22, 49, and 53 stand rejected under 35 U.S.C. 103(a) over Marcy in view of JAXB.

### 1-4, 8, 10-12, 14, 21, 30-33, 37-38, 40, 42-43, 45, 56, and 60

For claim 1, there are one or more claimed limitations that are not disclosed, taught or suggested by the cited references. Claim 1 recites the following limitations:

receiving a schema for the XML data;

identifying an element within the schema to associate with a named access procedure;  
determining if the element identified is appropriate for association with the named access procedure; and  
if the element identified is appropriate for association, then creating the named access procedure and associating the named access procedure with the element, the named access procedure providing direct access to the element within an instance of the XML data with **at least one access parameter that is determined for the element relative to a second element.**

1. Claim 1 recites “if the element identified is appropriate for association, then creating the named access procedure and associating the named access procedure with the element, the named access procedure providing direct access to the element within an instance of the XML data with **at least one access parameter that is determined for the element relative to a second element.**

According to the Office Action, Marcy allegedly discloses using an access procedure for providing direct access to the element within an instance of the XML data, with at least one access parameter that is determined for the element relative to a second element. Applicants respectfully submit that Dreyband and Marcy do not teach or suggest a “named access procedure providing direct access to the element within an instance of the XML data with **at least one access parameter that is determined for the element relative to a second element.”**

As discussed above, Marcy is directed toward determining the structure of objects in an XML document by parsing the document itself to determine instances of objects, such as elements and attributes. (Marcy, Abstract and col. 4, lines 35-36). In order for the application to access XML data, the Marcy parser provides a **handle to frequently used strings** (i.e. an element or attribute name) stored in a separate string pool from the XML data, a **start and end location in the text of the XML document for XML data values of the attributes** of the XML objects, and the application may access a definition for the hierarchy of elements (e.g. DTD). Thus, Marcy accesses

XML data in an XML document with start and end locations within the file and does not rely on any access parameters that are determined for an element relative to a second element. Marcy does not teach or suggest a “named access procedure providing direct access to the element within an instance of the XML data with at least **one access parameter that is determined for the element relative to a second element.**”

Dreyband is directed toward mapping the structural complexity of a schema into an object oriented language. (Dreyband, Abstract). According to the Office Action, Dreyband does not disclose the submittal of parameters within the function call and that the claim recites “at least one access parameter.” In Figure 3 and paragraph 0029 of Dreyband, Dreyband states the prior art storage of an element string “name” 74 within the Java class of type “Person” 72 with an access method “getName()” 78 to return the string with **no access parameters** in both the function call and no access parameters within the function body itself. To map the structural complexity of a schema as shown in Figure 4, Dreyband teaches the use of an internal static class “Name” 94 of class “Person” 92 with an access method “name()” with **no access parameters** in the function call and no access within the function body itself. Thus, Dreyband discloses the use of **no access parameters** and does not teach or suggest a named access procedure providing direct access to the element within an instance of the XML data with at least **one access parameter that is determined for the element relative to a second element.**

For at least this reason, Applicants respectfully submit that claim 18 is allowable over Marcy, Dreyband, and their combination.

2. Claims 11 and 30-33 recite sufficiently the same limitations as claim 1, and therefore, are patentable over Marcy, Dreyband, and their combination.

3. Claims 2-4, 8, 10, 12, 14, 16, 21, 37-38, 40, 42-43, 45, 56, and 60 are rejected and depend on claims 1, 11, and 30-33, and therefore, are patentable over Marcy, Dreyband, and their combination.

**15-17, 57-58, and 61-62**

Claims 15-17, 57-58, and 61-62 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Marcy in view of Dreyband as applied to claims 11, 32 and 33, and in view of U.S. Patent Publication No. 2003/0233618 published by Wan (Wan). Applicants respectfully traverse.

As discussed above, claims 11, 32, and 33, and their respective dependent claims are patentable over Marcy and Dreyband. Applicants respectfully submit that Wan is both not relied upon to disclose the limitation, and does not disclose the deficiencies present in Marcy and Dreyband. Wan is directed toward a method to reduce the size of indexes of structured documents. (Wan, Abstract). The reduced indexing is used in the formation of query execution plans for efficient searching an XML file. (Wan, Abstract and 029). Wan is silent with respect to “named access procedure providing direct access to the element within an instance of the XML data with at least one access parameter that is determined for the element relative to a second element.” Thus, Wan does not disclose a named access procedure providing direct access to the element within an instance of the XML data with at least **one access parameter that is determined for the element relative to a second element.**

**25-28**

Claims 25-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Marcy as applied to claim 18 and in view of Wan. Applicants respectfully traverse.

As discussed above, claim 18, and its respective dependent claims are patentable over Marcy. Applicants respectfully submit that Wan is both not relied upon to disclose the limitation, and does not disclose the deficiencies present in Marcy. Applicants respectfully submit that Wan is both not relied upon to disclose the limitation, and does not disclose the deficiencies present in Marcy and Dreyband. Wan is directed toward a method to reduce the size of indexes of structured documents. (Wan, Abstract). The reduced indexing is used in the formation of query execution plans for efficient searching an XML file. (Wan, Abstract and 029). Wan is silent with respect to “named access procedure providing direct access to the element within an instance of the XML data with at least one access parameter that is determined for the element relative to a second element.” Thus, Wan does not disclose a named access procedure providing direct access to the element within an instance of the XML data with at least **one access parameter that is determined for the element relative to a second element.**

**5-7, 9, 13, 39, 41, 44, 46, 55, and 59**

Claims 5-7, 9, 13, 39, 41, 44, 46, 55, and 59 stand rejected under 35 U.S.C. 103(a) as being unpatentable Marcy and Dreyband as applied to claims 1, 11, and 30-33, and in view of the Java Architecture for XML Binding (JAXB) published by Sun Microsystems on January 8, 2003.

As discussed above, claims 1, 11, and 30-33, and their respective dependent claims are patentable over Marcy and Dreyband. Applicants respectfully submit that JAXB is both not relied upon to disclose the limitation, and does not disclose the deficiencies present in Marcy and Dreyband. Pages 74 and 58 of the JAXB illustrates a mapping of XML schema built-in data types to Java datatypes and an example of the use of the mapping with accessor methods. JAXB is silent

with respect to “named access procedure providing direct access to the element within an instance of the XML data with at least one access parameter that is determined for the element relative to a second element.” Thus, JAXB does not disclose a named access procedure providing direct access to the element within an instance of the XML data with at least **one access parameter that is determined for the element relative to a second element.**

**22, 49, and 53**

Claims 22, 49, and 53 stand rejected under 35 U.S.C. 103(a) over Marcy as applied to claims 18, 34 and 35, and in view of JAXB. As discussed above, claims 18, 34, and 35, and their respective dependent claims are patentable over Marcy. Applicants respectfully submit that JAXB is both not relied upon to disclose the limitation, and does not disclose the deficiencies present in Marcy. Pages 74 and 58 of the JAXB illustrates a mapping of XML schema built-in data types to Java datatypes and an example of the use of the mapping with accessor methods. JAXB is silent with respect to “named access procedure providing direct access to the element within an instance of the XML data with at least one access parameter that is determined for the element relative to a second element.” Thus, JAXB does not disclose a named access procedure providing direct access to the element within an instance of the XML data with at least **one access parameter that is determined for the element relative to a second element.**

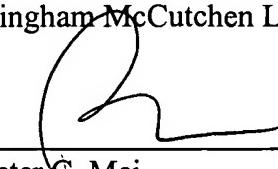
**CONCLUSION**

Based on the foregoing, all remaining claims are believed in condition for allowance. If the Examiner has any questions or comments regarding the remarks, please contact the undersigned at the number listed below.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number **OI7035732001**. The Commissioner is authorized to credit any overpayment or to charge any underpayment to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number **OI7035732001**.

Respectfully submitted,  
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